

ELECTION

The Applicants respectfully elect with traverse the claims of Species IV, which Applicants believe comprises at least claims 7-12, 18-38, 46, 54-56, 60-66, 68-70 and 73-83. Additionally, the Applicants have added claims 86-97, of which 86-90 and 93-95 are also believed to read on Species IV. Applicants further respectfully submit that at least claims 7-12, 22-28, 46, 54-56, 60-66, 68-70, 73-83, 86-90 and 93-95 are generic claims which read on each of the Species I-VI as defined by the Patent Office. It is recognized that additional claims may be subgeneric, that is, generic to more than one species but less than all species.

ARGUMENT

The Applicants respectfully traverse the election requirement with respect to election of a single species as defined by the Patent Office. The Patent Office has determined that the "application contains claims directed to the following patentably distinct species of the claimed invention: Species I: Figures 1-2B; Species II: Figure 2C; Species III: Figure 2D; Species IV: Figures 3A-3B; Species V: Figures 4A-4B; Species VI: Figures 5A-5B." As set forth below, the Applicants submit that the restriction requirement is improper and should be withdrawn.

First, the guidelines of the statutes and the rules govern whether a restriction requirement is proper. More specifically, 35 U.S.C. § 121 states in relevant part: "If two or more independent and distinct inventions are claimed in one application, the Director may require the application to be restricted to one of the inventions." (35 U.S.C. § 121; emphasis added).

Further, 37 CFR 1.142(a) states in relevant part: "If two or more independent and distinct inventions are claimed in a single application, the examiner in an Office action will require the applicant in the reply to that action to elect an invention to which the claims will be restricted, this official action being called a requirement for restriction (also known as a requirement for division)." (37 CFR 1.142(a); emphasis added).

In the context of a restriction requirement, MPEP § 802.01 defines "independent" as follows: "The term 'independent' (i.e., not dependent) means that there is no disclosed relationship between the two or more subjects disclosed, that is, they are unconnected in

design, operation, or effect, for example: (1) species under a genus which species are not usable together as disclosed; or (2) process and apparatus incapable of being used in practicing the process.” (MPEP § 802.01). The MPEP further clarifies the definition of “independent” by providing examples, stating in relevant part: “An article of apparel such as a shoe, and a locomotive bearing would be an example. A process of painting a house and a process of boring a well would be a second example.” (MPEP § 806.04(A)). In the present case, the differences between the six species set forth by the Patent Office are not nearly as glaring, and are much less bright-lined than the clear examples expressed above in MPEP § 806.04(A).

For example, all six of the species identified by the Patent Office are directed toward adjusters of a head-arm assembly. All of the adjusters have at least two layers in one form or another. As a consequence, the Applicants submit that the different species set forth by the Patent Office are not independent.

In the Restriction Requirement, the Examiner appears to have drawn a distinction between the components illustrated in Figures 1-5B of the present application based upon the shapes, configurations and/or locations for the adjuster on the head-arm assembly. However, the Patent Office appears to be disregarding that the structural components included in the embodiments illustrated in the Figures are not completely unconnected in design, operation, and effect, as required for a finding of independent inventions.

Moreover, “for purposes of the initial requirement, a serious burden on the examiner may be *prima facie* shown if the examiner shows by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP § 808.02.” (Guidelines, MPEP 803; emphasis added). The Applicants respectfully submit that the Patent Office has not adequately demonstrated reasons or examples to support its conclusions. Moreover, the Patent Office has not provided any explanation of separate classification or separate status in the art for the various species, or that different fields of search are required to examine the claims of each species together in one application.

The MPEP also clearly states: “Claims to be restricted to different species must be mutually exclusive. The general test as to when claims are restricted, respectively, to different species is the fact that one claim recites limitations which under the disclosure are

found in a first species but not in a second, while a second claim recites limitations disclosed only for the second species and not the first. This is frequently expressed by saying that claims to be restricted to different species must recite the mutually exclusive characteristics of such species.” (MPEP §806.04(f); emphasis added). In other words, for a restriction between two species to be proper, the characteristics of one of the species can only exist to the exclusion of the other species. In the present case, the species set forth by the Examiner do not necessarily follow this requirement.

Thus, these embodiments (“species”) are not wholly unconnected in design, operation, and effect. Accordingly, the Applicants submit that examining the embodiments illustrated in Figures 1-5B can potentially be performed together without conducting an additional search. Thus, the restriction requirement should be withdrawn or modified accordingly.

Based on the foregoing, the Applicants assert that the election requirement with respect to the Species is improper, and should be withdrawn. Consequently, the claims of Species I-VI, comprising claims 7-12, 18-38, 46, 54-56, 60-66 and 68-97 (following this amendment), should be examined together as required by the Species designations of the Patent Office, and pursuant to MPEP 802.01 and 803.

REMARKS

Claims 7-12, 18-38, 46, 54-56, 60-66 and 68-97 are pending in the above-captioned patent application following this amendment. Claims 7-12, 17-38 and 46-85 are subject to a restriction requirement. The Species IV claims, comprising claims 7-12, 18-38, 46, 54-56, 60-66, 68-70 and 73-83, were elected with traverse. Additionally, the Applicants have added claims 86-97, of which 86-90 and 93-95 are also believed to be included in Species IV. The Applicants further respectfully submit that at least claims 7-12, 22-28, 46, 54-56, 60-66, 68-70, 73-83, 86-90 and 93-95 are generic claims which read on each of the Species I-VI as defined by the Patent Office.

In addition, as set forth in greater detail below, the undersigned attorney for the Applicants hereby retracts the previous statement regarding common ownership of the present application and Mallary (US 6,307,719) as of the time the invention herein was made. In view of this retraction, the Applicants respectfully traverse the previous rejection by the Patent Office of claims 18-21 and 29-38. For the purpose of this traversal, claims 18 and 29 have been amended to include the limitations of their respective base claims.

Moreover, claims 22-28 have been amended to depend directly or indirectly from new claim 86, claim 46 has been amended to depend from new claim 94, and claims 54-56, 63, 68 and 78 have been amended to remove one or more limitations that are believed to be unnecessary in view of the cited references. In addition, claims 54-56 have also been amended to be consistent with the discussion during an interview with the Examiner, as set forth in greater detail below. Claims 17, 47-53, 57-59 and 67 have been canceled without prejudice, and claims 86-97 have been added by this amendment for the purpose of expediting the patent application process in a manner consistent with the goals of the Patent Office pursuant to 65 Fed. Reg. 54603 (September 8, 2000), even though the Applicants believe that the previously pending claims were allowable.

Support for the amendments to the claims and for the new claims can be found throughout the specification, drawings and the previously pending claims. More specifically, support for new claims 86-97 can be found at least in previously pending claims 1-16, 39-51 and 60-85, in Figures 1-5B, and in the specification at page 2, line 23 through page 3, line 15, at page 3, lines 20-25, at page 5, lines 23-27, at page 6, lines 27-32, at page 7, lines 24-26, at page 8, lines 3-5, at page 10, line 5 through page 12, line 17,

at page 13, lines 9-14, at page 13, line 27 through page 14, line 16, and at page 16, line 25 through page 18, line 11.

No new matter is believed to have been added by this amendment. Consideration of the Application is respectfully requested.

Interview Summary

On February 17, 2004, the undersigned attorney conducted a telephonic interview with Examiner David D. Davis. During the interview, the undersigned attorney indicated that the above-referenced statement regarding common ownership was erroneous and was made inadvertently, without deceptive intent, in the Response to Office Action filed by the undersigned on November 20, 2003. Further, the Examiner agreed that despite the erroneous statement and subsequent retraction of the statement, the Patent Office is not limited or compromised in any way regarding the prior art references that can be relied upon to reject any or all of the claims at this point in the prosecution.

On March 11, 2004, the undersigned attorney conducted a further telephonic interview with Examiner Davis. Prior to the interview, a proposed draft of the Amendment and Response to Restriction Requirement was forwarded to the Examiner for review. During the interview, the instant Restriction Requirement was discussed. No agreement was reached regarding the Restriction Requirement. Further, claim language was generally discussed that would likely place certain claims in condition for allowance. The Applicants have amended claims 54-56 consistent with the language discussed during the interview. The undersigned attorney wishes to thank the Examiner for his time and assistance during the interviews.

Common Ownership

The undersigned attorney for the Applicants previously stated in an Amendment and Response to Office Action, filed by Applicants on November 20, 2003, that "the present application and Mallary (US 6,307,719) were, at the time the invention disclosed in the present application was made, owned by Maxtor Corporation." Maxtor Corporation, current assignee of both Mallary and the present invention, has brought to

the attention of the undersigned attorney for the Applicants that this statement is inaccurate. Maxtor Corporation has provided information to the undersigned attorney that the assignment to Maxtor of Mallary actually occurred after the date that the present invention was made. Therefore, the undersigned attorney retracts the previous statement that Mallary and the present invention were commonly owned as of the date the present invention was made, and such statement should be hereinafter disregarded by the Patent Office during prosecution of the present application. Further, it should be noted that this previously-made statement regarding common ownership was made inadvertently by the undersigned attorney without deceptive intent.

In view of the above-referenced retraction, the Applicants wish to emphasize that Mallary is not excluded from use as prior art in a rejection under 35 U.S.C. § 103. Further, the Applicants will respond herein to the previous rejection by the Patent Office for all claims that are believed to include the same subject matter as of the time of the previous rejection. More specifically, as set forth below, the Applicants respectfully traverse the rejection under 35 U.S.C. § 103(a) of claims 18-21 and 29-38.

Rejections Under 35 U.S.C. § 103

Previously pending claims 6-13, 16 and 45-51 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mallary (US 6,307,719) in view of Simmons et al. (US 5,742,452). Further, claims 17-38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mallary in view of Simmons et al. Claims 6, 13, 16, 17, 45 and 47-51 have been canceled without prejudice herein or were previously canceled. Therefore the rejection of claims 6, 13, 16, 17 and 47-51 is believed to be moot. Claims 7-12 were previously amended to depend from claim 54, claims 22-28 were amended to depend directly or indirectly from new claim 86, and claim 46 was amended to depend from new claim 94. As amended, claims 7-12, 22-28 and 46 are believed to be allowable.

The Applicants respectfully traverse the previous rejection by the Patent Office under 35 U.S.C. § 103(a) of claims 18-21 and 29-38 on the grounds there is no motivation to combine the cited references, and that one or more of these claims are not taught or suggested by the combination of the cited references.

The Patent Office provided in its previous rejection that "Figure 1 of Mallary shows disk drive 80 including a drive housing; storage disk 15 and head arm assembly

5 coupled to the housing. Assembly 5 includes adjuster 34 and slider 10 coupled to adjuster 34. Adjuster 5 [sic] changes the gram load that is applied to the slider 10 as temperature, via power source 19 changes.” Additionally, the Patent Office stated that “Simmons et al discloses in column 7, lines 40-44, materials for a suspension being different with different properties such as thermal expansion, metal, titanium and modulus of elasticity.” The Applicants respectfully disagree with the analysis by the Patent Office.

First, claims 18-21 and 29-38 are patentable over the cited combination of references because there is no motivation to use the device taught by suspension assembly taught by Mallary in Simmons et al’s device. “The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant’s disclosure.” *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991; Emphasis added). In the present case, neither is found.

Even if the combination of references taught every element of the claimed invention (which it does not), without a motivation to combine, a rejection based on a prima facie case of obviousness has been held improper. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). Further, the “mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990; emphasis original and added).

For example, Mallary is directed toward a suspension assembly that uses a power source 19 to direct current to a load beam 30 to reduce downwardly directed gramload force. (Col. 6, lines 8-12). Once the flying height of the head 10 is adjusted and minimized, a frequency of writing data to the storage disk 15 may be adjusted to optimize the number of data bits-per-inch written thereon. (Col. 6, lines 29-32). Thus, Mallary is used during reading and writing to dynamically adjust the flying height of the head relative to the storage disk.

In contrast, Simmons et al. is directed toward an integral head/suspension and a method for making the head/suspension. Simmons et al. discloses the details of the manufacturing processes, but does not recognize the need for dynamically adjusting the flying height of the head above a rotating storage disk based on temperature, or for any

other reason. The quoted section of Simmons et al. appears to relate to a means of an initial adjustment of the gram load of the suspension during manufacturing, but such means does not take into account that the gram load or flying height can be continually adjusted during use of the disk drive. (Col. 7, lines 40-42).

In addition, Simmons et al. does not teach or suggest using a first layer of material and a second layer of material that are different from each other.

In the present case, the prior art does not clearly suggest the desirability of the resultant combination because there is absolutely no recognition in Simmons et al. of adjusting the gram load of the suspension assembly during operation of a disk drive. Simmons et al. discusses the method of manufacturing, but does not even mention or recognize whether the head/suspension structure can adjust the gram load based on changing temperatures during operation of the disk drive. Further, Simmons et al. does not discuss using multiple layers of materials. Therefore, one skilled in the art reading Mallary would not be motivated to combine the suspension assembly in Mallary that uses a power source to adjust the flying height of the head, with a single structure head/suspension that uses materials having different thermal expansion coefficients for adjusting the gram load during the assembly process of the head/suspension.

Absent such suggestion, a person skilled in the art who was looking for a solution to the problem of dynamically adjusting the gram load or flying height of a slider based on the temperature of the disk drive during operation would hardly be disposed, on any objective basis, to consider a reference like Simmons et al., which very cursorily addresses a way to change the gram load of the suspension during manufacture of the suspension.

Therefore, the applicant submits that it would not be proper to combine the references in the manner suggested by the Patent Office. Accordingly, the rejection by the Patent Office is not supported by the cited references. Thus, claims 18, 29 and 30 should be allowed. Because claims 19-21 depend from claim 18, and claims 31-38 depend from claim 30, these claims should also be allowed.

Second, the Applicants submit that Simmons does not mention in any respect materials for a suspension being different with properties such as metal, titanium and modulus of elasticity. As one example, dependent claim 38 is directed toward a disk

drive having an adjuster that requires that "the first layer is made of steel and the second layer is made of titanium." Thus, claim 38 is not taught or suggested by the cited combination of references, and is believed to be patentable.

New Claims

New claims 86-97 have been added by this amendment. New claims 86-97 are of a slightly different scope than the previously pending claims. However, claims 86-97 are believed to be allowable in view of the cited references.

For example, Mallary directs current to the load beam 30 using a power source 19 in order to heat the legs 34 of the load beam 30. This reduces the downwardly directed gramload force provided by the legs 34 to loadbeam 30, flexure portion 25 and head 10. (Col. 6, lines 9-11).

In contrast, new claim 86 is directed toward a disk drive that requires "a drive housing; a drive circuitry; and a head arm assembly coupled to the drive housing, the head arm assembly including (i) a slider that is connected to the drive circuitry, and (ii) an adjuster that is coupled to the slider, the adjuster being electrically isolated from the drive circuitry, the adjuster dynamically adjusting the gram load applied to the slider based on the environmental temperature near the adjuster." In view of the cited references, claim 86 is believed to be allowable. Because claims 22-28 and 87-92 depend directly or indirectly from claim 86, they are also believed to be allowable.

New claim 93 is directed toward a "method for maintaining a slider of a disk drive within a desired flying height range as temperature within the disk drive changes, the method comprising the steps of: coupling the slider to an adjuster, the adjuster being electrically isolated from a drive circuitry of the disk drive; and dynamically adjusting the gram load applied to the slider based on the environmental temperature near the adjuster so that the slider is maintained within the desired flying height range." In view of the cited references, claim 93 is believed to be allowable. Because claims 46 and 94-97 depend directly or indirectly from claim 93, they are also believed to be allowable.

CONCLUSION

In conclusion, the Applicants respectfully assert that all of the pending claims, including claims 7-12, 18-38, 46, 54-56, 60-66 and 68-97, should be examined together, and that the restriction requirement is improper and should be withdrawn. Alternatively, the Applicants submit that the Group IV claims, comprising claims 7-12, 18-38, 46, 54-56, 60-66, 68-70, 73-83, 86-90 and 93-95 should be examined together herein and that all of the claims are in condition for allowance. Accordingly, an early notice of allowance is respectfully requested. The Examiner is requested to call the undersigned at 858-672-0454 for any reason that would advance the instant application to issue.

Dated this the 11th day of March, 2004.

Respectfully submitted,



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